



briefing notes - road safety issues

Otorohanga District

New Zealand Transport Agency has prepared this eleventh road safety issues report. It is based on reported crash data and trends for the 2005-2009 period. The intent of the report is to highlight the key road safety issues and be a resource to identify possible ways to reduce the number of road deaths and injuries in Otorohanga District.

All the material unless otherwise stated in this report applies to both local roads and state highways. Local roads are all non state highway roads in Otorohanga District.

In March the Government released Safer Journeys the road safety strategy for the next ten years. The two following pages contain a brief introduction to the strategy and a link to find more information.

The issues chosen for this report are drawn from either the most common crash types, those that appear over-represented when Otorohanga District is compared to similar local bodies or those with high social cost (high numbers of fatal and serious crashes mainly).

We have included a brief overview of crashes in Otorohanga District and we encourage safety engaged staff at Otorohanga District Council to use their free access to the Ministry of Transport's Crash Analysis System (CAS) to delve deeper into the highlighted. All data and maps in this note are from CAS.

Major road safety issues

Otorohanga District

Crashes at bends

Road factor crashes

2009 road trauma

Casualties

Otorohanga District

Deaths

2

Serious casualties

5

Minor casualties

27

National priorities from Road Safety 2020— Safer Journeys

Speed

Alcohol / drugs

Young drivers

Roads and roadsides

Motorcyclists

Crashes

Otorohanga District

Fatal crashes

2

Serious injury crashes

4

Minor injury crashes

16

Non-injury crashes

49

Safer Journeys

For the past decade road safety in New Zealand has been directed by the Road Safety 2010 strategy.

This strategy was introduced in 2003 and aimed to reduce deaths and casualties from road crashes.

In March 2010 the Government released a new strategy, "Safer Journeys", to build on the gains made under the Road Safety to 2010.

Under the new strategy, road safety will be looked at from a system wide approach rather than focusing so strongly on the road user.

The emphasis will be on improving all the parts of the road transport system that impact on safety; the road, the vehicle, travel speeds and the road user.

Under the 2020 strategy a number of priority areas have been chosen as the areas of focus.

These areas were assigned a priority, based on research that shows five major areas of concern, six areas of lesser concern, and two areas where continued focus is needed, or concern is emerging.

These divisions are shown in "Table 3" opposite. This table is a direct extract from page 12 of the Safer Journeys document which can be found at: <http://www.transport.govt.nz/saferjourneys/Documents/SaferJourneyStrategy.pdf>

To reflect the new strategy, changes to the wording and the way data is presented in these briefing notes to reflect and emphasise the connections to the new strategy. In particular, we have included more tables showing age distribution as problems with the safety of young drivers as a particular focus of Safer Journeys.

However, as these reports are based on crash data, particularly fatal and serious crashes, the actual "issues" identified by our analysis remain as before, fact based. It would be irresponsible of us to ignore an area of high social cost in a particular local body or region just because it wasn't a national priority.

We have prepared a table on the following page which shows the areas of "high concern" under Safer Journeys 2020 strategy.

This table allows some relative comparison of Safer Journeys priorities across the local bodies in the area covered by the Hamilton NZTA Office.

Table 3 – Safer Journeys’ areas of concern and the Safe System

AREAS OF CONCERN WE WILL ADDRESS	WHERE WE WILL TAKE ACTION ACROSS THE SAFE SYSTEM			
	SAFE ROADS AND ROAD-SIDES	SAFE SPEEDS	SAFE VEHICLES	SAFE ROAD USE
Areas of high concern				
Reducing alcohol/drug impaired driving			✓	✓
Increasing the safety of young drivers	✓	✓	✓	✓
Safe roads and roadsides	✓			
Safe speeds	✓	✓	✓	
Increasing the safety of motorcycling	✓	✓	✓	✓
Areas of medium concern				
Improving the safety of the light vehicle fleet			✓	✓
Safe walking and cycling	✓	✓	✓	✓
Improving the safety of heavy vehicles	✓	✓	✓	✓
Reducing the impact of fatigue	✓	✓	✓	✓
Addressing distraction	✓		✓	✓
Reducing the impact of high risk drivers		✓	✓	✓
Areas of continued and emerging focus				
Increasing the level of restraint use			✓	✓
Increasing the safety of older New Zealanders	✓	✓	✓	✓

For some priorities (eg motorcycling), complementary action will be taken across all four areas of the Safe System. For others (eg reducing the impact of drink driving or safe roads), more effort would be focussed on one or two of the four Safe System areas.

Table source: Ministry of Transport 2020 Safer Journeys

Status of the areas of “high concern” from Safer Journeys 2020 for the Waikato Region

(table below refers only to fatal and serious crashes on both local roads and state highways for the years 2005–2009 except for the “intersection” columns which also include minor crashes for reasons of sample size)

Safer Journeys area of concern	Reducing alcohol and drug impaired driving	Increase the safety of young drivers	Safer roads and roadsides			Safe speeds	Increasing the safety of motorcycling
	Measure	Percentage of fatal and serious crashes with this factor	Percentage of fatal and serious crashes with at fault drivers aged 24 years or less	Percentage of fatal and serious crashes with an object struck	Number of urban intersections with three or more injury crashes in the last five years	Number of rural intersections with three or more injury crashes in the last five years	Percentage of fatal and serious crashes where speed was a factor
Thames Coromandel District	31	27	52	5	0	30	29
Hauraki District	25	24	51	3	2	29	18
Matamata Piako District	25	31	46	2	6	28	17
Waikato District	25	25	53	5	15	25	18
Hamilton City	23	35	30	97	8	19	17
Waipa District	17	40	47	5	8	26	15
Otorohanga District	29	25	50	2	0	15	23
Waitomo District	21	29	65	1	0	32	14
South Waikato District	21	27	42	1	3	28	15
Taupo District	25	31	47	15	6	26	21
Waikato Region	24	30	46	136	47	26	18
New Zealand	23	34	45	1938	320	23	18

Otorohanga District overview

In 2009 on local roads in Otorohanga District there were 12 injury crashes and 14 non-injury crashes. In addition on State Highways in Otorohanga District there were 10 injury crashes and 35 non-injury crashes. The tables below show the number of injuries resulting from the 22 injury crashes by rural or urban areas for local roads and state highways (rural is defined as an area with a speed limit of 80km/h or more).

Casualties by urban / rural 2009				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	2	4	25	31
Urban	0	1	2	3
Total	2	5	27	34

Casualties by state highway / local road 2009				
	Fatalities	Serious injuries	Minor injuries	Total
Local road	1	3	16	20
State highway	1	2	11	14
Total	2	5	27	34

Crash trends in Otorohanga District				
Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
2000	1	12	15	28
2001	3	9	18	30
2002	2	11	16	29
2003	1	11	27	39
2004	1	13	16	30
2005	2	7	28	37
2006	3	10	42	55
2007	2	9	28	39
2008	0	13	33	46
2009	2	4	16	22

Local road crash characteristics		
Crash type or contributory cause 2005 to 2009	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause
Alcohol	29	17
Speed	15	27
Bends	56	60
Road factors	25	22

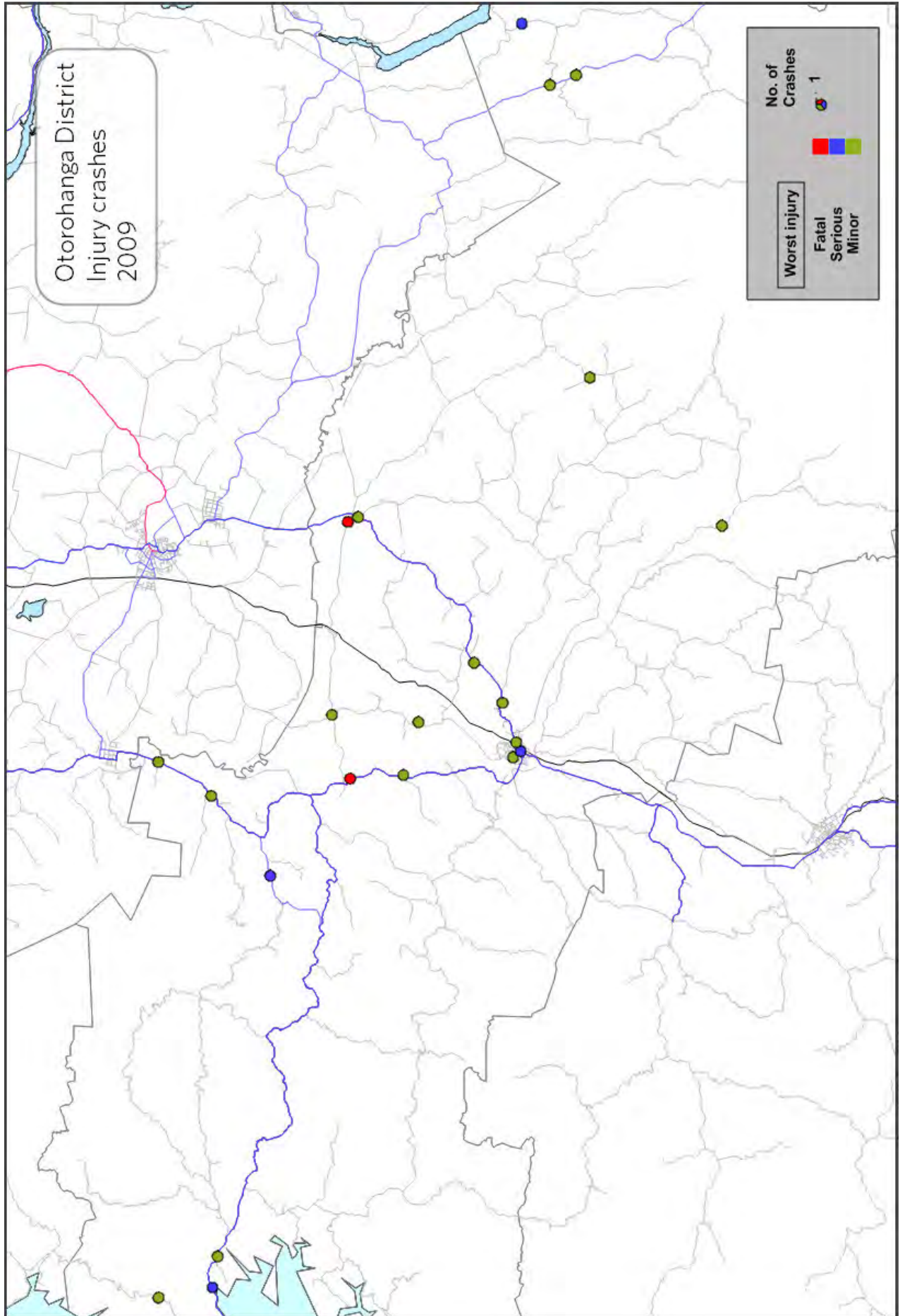
Further information about the 82 injury and 84 non-injury crashes on **local roads** in Otorohanga District 2005 to 2009:

- 4 deaths, 16 serious and 96 minor injuries
- Worst month April & July, best March & June
- Worst day Saturday, best Tuesday
- 36 percent on wet roads
- 36 percent at night
- 19 percent at intersections
- 117 roadside objects struck *
- Most represented five year age block in 'at fault' drivers in injury crashes: 15 to 19 years (28 percent of at fault drivers)
- Social cost of crashes in 2009 \$7.2m

Further information about the 117 injury and 134 non-injury crashes on **state highways** in Otorohanga District 2005 to 2009:

- 6 deaths, 35 serious and 127 minor injuries
- Worst month December, best November
- Worst day Friday, best Monday
- 38 percent on wet roads
- 36 percent at night
- 15 percent at intersections
- 172 roadside objects struck *
- Most represented five year age block in 'at fault' drivers in injury crashes: 20 to 24 years (14 percent of at fault drivers)
- Social cost of crashes in 2009 \$7.7m

* It needs to be noted that if a vehicle hits the same type of object more than once it is only counted in CAS once.



Crashes at bends

Between 2005 and 2009 56 percent of fatal and serious crashes and 60 percent of all injury crashes in Otorohanga District were loss of control or head on at bends.

Crashes at bends 2005 to 2009				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2005	1	2	20	23
2006	1	4	25	30
2007	2	5	19	26
2008	0	10	11	27
2009	1	3	9	13
Total	5	24	90	119

49 percent of at fault drivers involved in crashes at bends were aged under 30 and 17 percent were aged under 20.

Drivers fuelled by alcohol and travelling too fast for their own abilities and those appropriate to the conditions, especially in the wet are all too common themes in bend related crashes in the district. (see bullet points)

Ages of at fault drivers in bend related injury crashes 2005 to 2009			
Ages	Female	Male	Total
15 to 19	9	11	20
20 to 24	8	10	18
25 to 29	4	9	13
30 to 34	4	4	8
35 to 39	1	6	7
40 to 44	6	12	18
45 to 49	2	7	9
50 to 54	0	8	8
55 to 59	0	5	5
60 to 64	1	1	2
65 to 69	3	1	4
70 to 74	1	0	1
75+	1	1	2
Total	40	75	115

After drivers lose control their vehicles often crash into roadside hazards such as ditches, banks, poles or trees. Hitting these objects can result in a relatively minor off-road event turning into something far more serious. Appropriate clear zones and roadside management will continue to help improve road safety.

The most common roadside hazards struck in injury loss of control or head on crashes on bends in Otorohanga District were fences (35), cliffs and banks (29), trees (17) and over bank (13) from a total of 120 objects struck.

Further information about the 51 injury loss of control or head on crashes on bends on **local roads** in Otorohanga District 2005 to 2009:

- 1 death, 9 serious and 61 minor injuries
- 67 percent of at fault drivers were male
- Most common crash type "loss of control turning right" (28 crashes)
- 25 percent of crashes involved alcohol
- 39 percent in the wet
- 49 percent of crashes involved speed too fast for the conditions
- Worst month January, best September & November
- Worst day Sunday, best Thursday
- Worst three hour time period 9am to midday
- Number of objects struck 41

Further information about the 68 injury loss of control or head on crashes on bends on **state highways** in Otorohanga District 2005 to 2009:

- 5 deaths, 19 serious and 69 minor injuries
- 68 percent of at fault drivers were male
- Most common crash type "loss of control turning right" (27 crashes)
- 10 percent of crashes involved alcohol
- 40 percent in the wet
- 35 percent of crashes involved speed too fast for the conditions
- Worst month January, best November
- Worst day Friday, best Monday
- Worst three hour time period midday to 3pm
- Number of objects struck 47

Road Factors - including roadside hazards

A safe road environment includes appropriate geometric design standards, good delineation, adequate surface skid resistance and a roadside free of unforgiving hazards.

Safer Journeys places "Safer Roads and Roadides" as one of the five areas of "High concern".

Between 2005 and 2009 in Otorohanga District "road factors" were a contributing factor in 22 percent of fatal and serious crashes and 25 percent of injury crashes. Additionally in Otorohanga District between 2005 and 2009 50 percent of all fatal and serious crashes and 66 percent of injury crashes involved roadside hazards being struck.

Road factor related injury crashes					
	2005	2006	2007	2008	2009
Rural	2	11	7	14	7
Urban	0	1	1	0	0
Total	2	12	8	14	7

Roadside hazards normally contribute to the overall crash outcome by increasing injury severity but can in themselves be a contributory factor in a crash. For example occupants in an errant vehicle striking a large tree close to the road edge are likely to sustain worse injuries than if the tree was not present. If the same tree had low branches and was located at an intersection it could also contribute to a lack of visibility. It needs to be noted that if a vehicle hits the same type of object more than once it is only counted in CAS once.

Types of road factors in injury crashes		
Road factor type 2005 to 2009	Local roads	State highways
Slippery road*	16	20
Road surface in poor condition	4	4
Road obstructed	0	1
Visibility limited	3	1
Signs or signals (needed or faulty)	1	0

* note that NZTA does not assume that a road that is "wet" is necessarily "slippery". This factor is only added to CAS if the attending Police Officer specifically mentions a "slippery road".

Most common types of hazard struck - all injury crashes in Otorohanga District 2005 to 2009

Type of hazard	Number of times hazard struck
Ditch	4
Cliff/bank	9
Fence	13
Post or pole	2
Tree	5
Parked vehicle	1

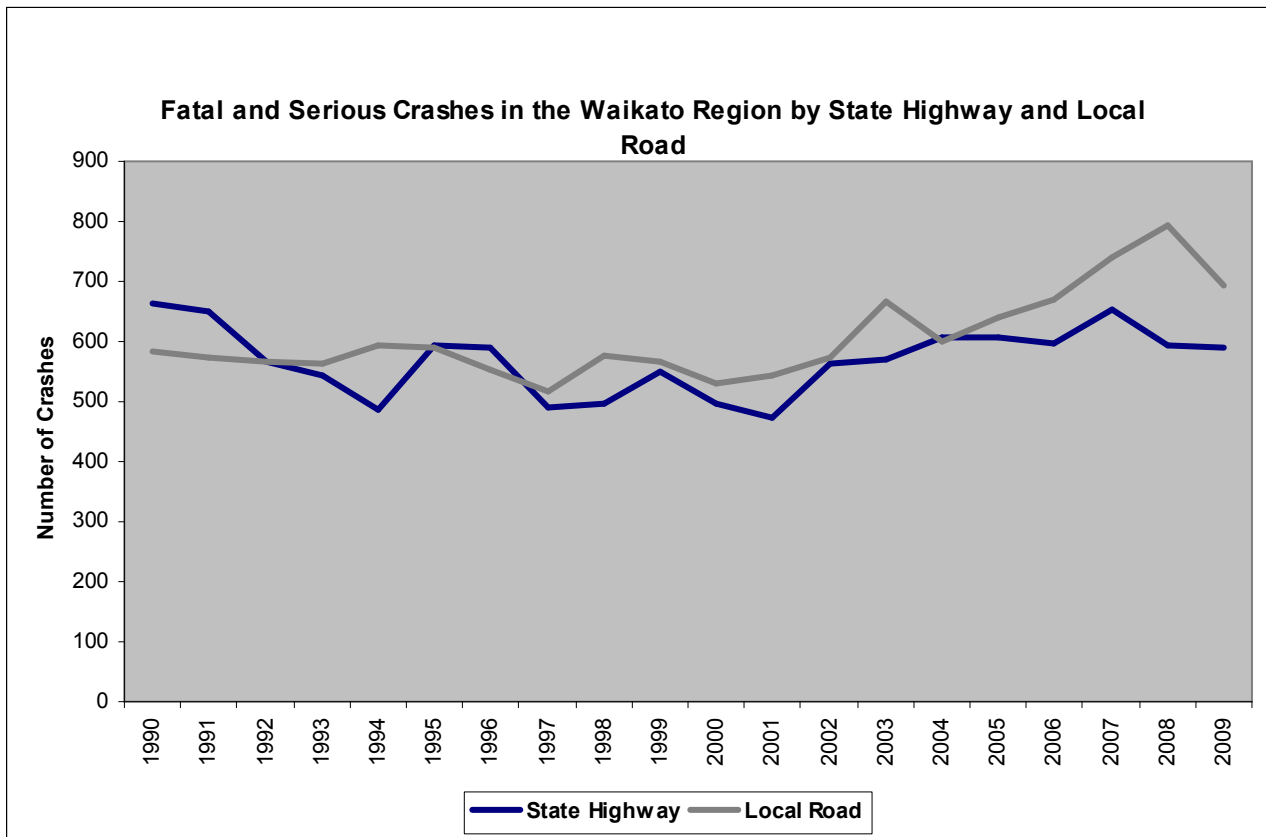
Further information about the 21 road factor related injury crashes on **local roads** in Otorohanga District 2005 to 2009:

- 2 deaths, 6 serious and 23 minor injuries
- Most common crash type "loss of control at bends" (17 crashes)
- 62 percent wet road
- 10 percent night time
- Most common at fault driver age group 40 to 44 years (23 percent of at fault drivers)
- Worst months April & August, best February

Further information about the 22 road factor related injury crashes on **state highways** in Otorohanga District 2005 to 2009:

- 1 death, 6 serious and 22 minor injuries
- Most common crash type "loss of control at bends" (19 crashes)
- 50 percent wet road
- 27 percent night time
- Most common at fault driver age group 20 to 24 years (23 percent of at fault drivers)
- Worst month January, best September

Looking back—the last two decades ...



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